

REMARKS

Rejection Under 35 U.S.C. §103

Claims 1, 4, 7 and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rahbar et al., U.S. 6,337,350. More specifically, the Office maintains the position that the instant compounds, as breakers of advanced glycation endproducts, also share the same properties of the inhibitor compounds taught in Rahbar et al. Further, the Office argues that Applicant has not shown any unexpected results or superior properties of the instant compounds over the prior art compounds. Thus, one trained in the art would be motivated to make isomers of the prior art compound for the uses taught therein. Finally, the Office argues that one trained in the art would also be motivated to test the isomeric compounds as well as the compounds taught by Rahbar et al. for reversal of the initially formed glycation endproducts.

Claims 1, 4, 7 and 10 have been amended and as such, should overcome the rejection. Rahbar et al., U.S. 6,337,350 discloses compounds LR 1 through LR 92, which were screened for inhibitory effects on protein glycation and AGE-formation. However, Rahbar et al., U.S. 6,337,350 does not teach or suggest using LR 102 and LR 99 as inhibitors or breakers of advanced glycation endproducts, particularly for the purpose recited in the claimed methods. Therefore, the methods of Applicant's invention are not obvious in view of the '350 patent.

Judicially Created Doctrine of Obvious-Type Double Patenting Rejection

Claims 1-12 were rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 1-2, 4-5, 7-8, 10-11, 13-14 and 18-22 of Rahbar et al., U.S. 6,333,350. The amended claims are directed to using the compounds LR 102 (1, 4-benzene-bis[4-methyleneaminophenoxyisobutyric acid) and LR 99 (4-[3, 5-dichlorophenylureidophenoxyisobutyl]4-aminobenzoic acid. Claims 1-2, 4-5, 7-8, 10-11, 13-14 and 18-22 of Rahbar et al., U.S. 6,333,350 claim LR 20, LR 23 and LR 90. The use of LR 102 and

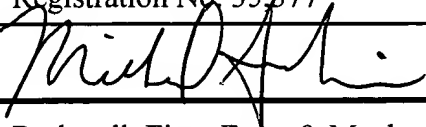
LR 99 in the recited methods is not obvious over Rahbar et al., U.S. 6,333,350. Applicant thus respectfully submits that the claims, as amended, overcome the rejection.

Provisional Nonstatutory Double Patenting Rejection

Claims 1-12 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of co-pending application Serial No. 09/800,976 (hereinafter the '976 application). The Office argues that the claims of the current application and those of the co-pending application are not patentably distinct from each other. Claims 1-5 of the '976 application claim LR 99 and LR 102 as novel inhibitors of advanced glycation endproducts. Applicant respectfully submits that claims 1-12, as amended, are patentably distinct from the claims of the '976 application for reasons already of record. However, Applicant is filing a terminal disclaimer at this time in order to advance prosecution of this application.

CONCLUSION

In view of the above remarks, it is submitted that the claims are in condition for allowance. The Examiner is invited to telephone the undersigned to expedite allowance of this application.

RESPECTFULLY SUBMITTED,					
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Attachments: Marked-up Version of Claim Amendments
Terminal Disclaimer



Marked-Up Version of Amended Claims:

1. (Amended) A method for cleaving glycation endproducts or cross-linked proteins in an organism, wherein said method comprises administering an effective amount of a compound or a pharmaceutically acceptable salt of said compound to said organism wherein said compound is selected from the group consisting of:

~~LR-102:~~ 1, 4-benzene-bis[4-methyleneaminophenoxyisobutyric acid]; ~~and~~

~~LR-99:~~ 4-[3,5-dichlorophenylureidophenoxyisobutyryl]-4-aminobenzoic acid;

~~L-bis-[4-(4-chlorobenzamidophenoxyisobutyryl)cystine];~~

~~4-(3,5-dichlorophenylureido)phenoxyisobutyryl-1-amidocyclohexane-1-carboxylic acid;~~

~~methylene bis [4,4'-(2-chlorophenylureidophenoxyisobutyric acid)];~~

~~1,1-dimethylbiguanide; and~~

~~5-aminosalicylic acid.~~

4. (Amended) A method of reversing deleterious effects of aging in an organism wherein said effects are formation of glycation endproducts or protein cross-linking, wherein said method comprises administering an effective amount of a compound or a pharmaceutically acceptable salt of said compound to said organism wherein said compound is selected from the group consisting of:

~~LR-102:~~ 1, 4-benzene-bis[4-methyleneaminophenoxyisobutyric acid]; ~~and~~

~~LR-99:~~ 4-[3,5-dichlorophenylureidophenoxyisobutyryl]-4-aminobenzoic acid;

~~L-bis-[4-(4-chlorobenzamidophenoxyisobutyryl)cystine];~~

~~4-(3,5-dichlorophenylureido)phenoxyisobutyryl-1-amidocyclohexane-1-carboxylic acid;~~

~~methylene bis [4,4'-(2-chlorophenylureidophenoxyisobutyric acid)];~~

~~1,1-dimethylbiguanide; and~~

~~5-aminosalicylic acid.~~

7. (Amended) A method of reversing complications resulting from diabetes wherein said complications result from formation of glycation endproducts or protein cross-linking, wherein said method comprises administering an effective amount of a compound or a pharmaceutically acceptable salt of said compound to said organism wherein said compound is selected from the group consisting of:

LR-102: 1, 4-benzene-bis[4-methyleneaminophenoxyisobutyric acid]; and

LR-99: 4-[3,5-dichlorophenylureidophenoxyisobutyryl]-4-aminobenzoic acid;

~~L-bis-[4-(4-chlorobenzamidophenoxyisobutyryl)cystine];~~

~~4-(3,5-dichlorophenylureido)phenoxyisobutyryl-1-amidocyclohexane-1-carboxylic acid;~~

~~methylene bis-[4,4'-(2-chlorophenylureidophenoxyisobutyric acid)];~~

~~1,1-dimethylbiguanide; and~~

~~5-aminosalicylic acid.~~

10. (Amended) A method of reversing disease progression [progress] in a patient of rheumatoid arthritis, Alzheimer's disease, uremia, neurotoxicity, or atherosclerosis, wherein said method comprises administering an effective amount of a compound or a pharmaceutically acceptable salt of said compound to said organism wherein said compound is selected from the group consisting of:

LR-102: 1, 4-benzene-bis[4-methyleneaminophenoxyisobutyric acid]; and

LR-99: 4-[3,5-dichlorophenylureidophenoxyisobutyryl]-4-aminobenzoic acid;

~~L-bis-[4-(4-chlorobenzamidophenoxyisobutyryl)cystine];~~

~~4-(3,5-dichlorophenylureido)phenoxyisobutyryl-1-amidocyclohexane-1-carboxylic acid;~~

~~methylene bis-[4,4'-(2-chlorophenylureidophenoxyisobutyric acid)];~~

~~1,1-dimethylbiguanide; and~~

~~5-aminosalicylic acid.~~